AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (original): A device (D) for managing the measurement of parameters of end-to-end type data streams in a communication network (N) composed of at least two domains (Ai) coupled together, and each equipped with a measuring appliance (Mi) capable of delivering local measurements representing parameter values of local end-to-end data streams, where said measuring appliances (Mi) implement various measuring processes, characterised in that it includes

(i) monitoring means (MM) arranged so as to order the constitution of a specific measurement configuration in each measuring appliance (Mi) as a function of at least its measuring process and overall measurement specifications, and

(ii) calculation means (CM) arranged so as to deliver first data representative of the parameter values of overall end-to-end data streams from local measurements delivered by the said configured measuring appliances (Mi).

2. (currently amended): [[A]] The device as in claim 1, ~~characterised in that~~ wherein said monitoring means ~~(MM) are~~ is arranged ~~so as~~ to order the constitution of [[a]] the specific measurement configuration in each measuring appliance ~~(Mi)~~ as a function of ~~its~~ the corresponding measuring process, second data representing ~~the~~ an arrangement of ~~its~~ the respective associated domain and overall measurement specifications.

3. (currently amended): [[A]] The device as in claim 1, ~~characterised in that~~ wherein said monitoring means ~~(MM) include~~ includes ~~the~~ an [[first]] interface means ~~(ID) arranged to allow the~~ for defining ~~definition of~~ said overall measurement specifications.

4. (currently amended): [[A]] The device as in claim 1, ~~characterised in that~~ wherein said monitoring means ~~(MM) include~~ includes configuration means ~~(MC) arranged to determine,~~

for determining a configuration data for each measuring appliance ~~(Mi)~~, including determining ~~the~~ local specifications of measurements and defining ~~its~~ the specific measurement configuration of each measuring appliance based on the determined local measurement specifications ~~to be constituted~~.

5. (currently amended): [[A]] The device as in claim 4, ~~characterised in that~~ wherein said ~~monitoring~~ configuration means ~~(MM) are~~ is arranged to further determine the configuration data by determining ~~corresponding~~ data representing ~~the~~ a correspondence between said determined local measurement specifications and said overall measurement specifications.

6. (currently amended): [[A]] The device as in claim [[1]] 5, ~~characterised in that~~ wherein said storage means ~~(BD) define~~ includes a first memory ~~(B1) capable of storing~~ to store data representing said overall measurement specifications.

7. (currently amended): [[A]] The device as in claim 6, ~~characterised in that~~ wherein said storage means ~~(BD) define~~ includes a second memory ~~(B2) capable of storing~~ to store data representing at least one of said local measurement specifications ~~and/or~~ or said configuration data.

8. (currently amended): [[A]] The device as in claim ~~6~~ 7, ~~characterised in that~~ wherein ~~in the presence of~~ at least one domain ~~(D1) which~~ includes a measuring appliance ~~(M1)~~ implementing a measuring process based ~~upon~~ on a measurement model, and wherein said storage ~~resources (BD) define~~ means includes a third memory ~~(B3) capable of storing~~ to store ~~the~~ data representing said measurement model.

9. (currently amended): [[A]] The device as in claim 4, ~~characterised in that~~ wherein said calculation means ~~(CM) include~~ includes a main calculation module ~~(CMP)~~ arranged to determine said first data from local measurements delivered by said configured measuring appliances ~~(Mi)~~, said local measurement specifications and at least one value aggregation model.

10. (currently amended): [[A]] The device ~~or arrangement~~ as in claim 9, ~~characterised in that~~ wherein said main calculation module ~~(CMP)~~ is arranged to determine said first data from additional data.

11. (currently amended): [[A]] The device as in claim 10, ~~characterised in that~~ wherein said additional data define an aggregation model for additional values.

12. (currently amended): [[A]] The device as in claim 9, ~~characterised in that~~ wherein said second memory ~~(B2)~~ is capable of storing the data representing the said value aggregation model and/or of the said additional value aggregation model.

13. (currently amended): [[A]] The device as in claim 8, ~~characterised in that~~ wherein said main calculation module ~~(CMP)~~ is arranged to determine said first data from local measurements delivered by the said configured measuring appliances ~~(Mi)~~, the said local measurement specifications, at least one value aggregation model and at least one of said measurement models.

14. (currently amended): [[A]] The device as in claim 10, ~~characterised in that~~ wherein said additional data define an additional measurement model.

15. (currently amended): [[A]] The device as in claim 14, ~~characterised in that~~ wherein said third memory ~~(B3)~~ is capable of storing the data representing said measurement model and/or of the additional measurement model.

16. (currently amended): [[A]] The device as in claim 4, ~~characterised in that~~ wherein said calculation means ~~(CM) include~~ includes [[a]] an auxiliary calculation module ~~(CMA) arranged~~ to determine second data representing ~~the~~ respective contributions of the

~~various~~ coupled domains to the first data, from the local ~~measurement~~ measurements delivered by said configured measuring appliances ~~(Mi)~~ and said local measurement specifications.

17. (currently amended): [[A]] The device as in claim 16, ~~characterised in that~~ wherein said auxiliary calculation module ~~(CMA) is arranged to determine~~ determines the second data representing at least one of relative contributions ~~and/or~~ or absolute contributions.

18. (currently amended): [[A]] The device as in claim 16, ~~characterised in that~~ wherein said storage means includes a first memory ~~(B1) is capable of storing~~ which stores at least one of said first or second data.

19. (canceled).

20. (currently amended): [[A]] The device as in claim 16, ~~characterised in that it includes~~ further including:

an output interface ~~(IS)~~ coupled to said calculation means ~~(CM) and capable of delivering~~ to deliver at least one of said first ~~and/or~~ or second data at an output when so ordered.

21. (currently amended): [[A]] The device ~~or arrangement~~ as in claim ~~16~~ 18, ~~characterised in that it includes~~ further including:

an output interface ~~(IS) which is capable of extracting~~ to extract at least one of the said first ~~and/or~~ or second data from the first memory ~~(B1)~~ at an output when ordered to do so.

22. (currently amended): [[A]] The device as in claim 20, ~~characterised in that it includes~~ further including:

a management information database ~~(MIB)~~ to receive ~~which is supplied with~~ at least one of the first ~~and/or~~ or the second data ~~by~~ from said output interface ~~(IS)~~.

23. (currently amended): [[A]] The device as in claim 1, ~~characterised in that it includes~~ further including:

a ~~second~~ configuration interface ~~resources (IC) arranged in the shape of~~ which includes:

interface modules ~~(IMj)~~, each dedicated to a corresponding specific measuring process, coupled to said monitoring means ~~(MM),~~ [[to]] said measuring appliances, which execute the corresponding specific measuring process, ~~(Mi)~~ and [[to]] said calculation means ~~(CM),~~ and ~~each~~ arranged to configure the corresponding measuring appliance ~~(Mi) and to~~, collect ~~it's~~ the local measurements from each corresponding measuring appliance, and ~~in order to~~ supply the collected local measurements to said calculation means ~~(CM)~~.

24. (currently amended): [[A]] The device as in claim 23, ~~characterised in that~~ wherein at least one of said interface modules ~~(4) constitutes~~ includes:

an external measuring appliance ~~(M4)~~ for one of the coupled domains ~~a domain (A4)~~ of said communication network ~~(N)~~.

25. (currently amended): A communication network ~~(N)~~ which includes at least two domains ~~(Ai)~~ coupled together and each ~~equipped with~~ including a measuring appliance ~~(Mi) capable of~~ to deliver ~~delivering~~ corresponding local measurements representing the parameters ~~parameter~~ values of the local end-to-end data streams, wherein ~~where~~ said measuring appliances ~~(Mi)~~ implement different measuring processes, ~~characterised in that it includes~~ and further including at least [[a]] one managing ~~management~~ device ~~(D) as in~~ of claim 1.

26. (canceled).

27. (currently amended): ~~Use~~ The network as in claim ~~26~~ 25, ~~characterised in that comprised of said network technologies are chosen from a group which includes~~ one of:

a transmission network ~~networks~~ including at least one of ~~the~~ a WDM, a SONET or an SDH network ~~type in particular~~,

a data network including at least one of ~~the~~ an IP-Internet or an ATM ~~type in particular~~, network, and

a speech network including at least one of ~~the~~ a conventional, a mobile or a NGN network ~~type in particular~~.

28. (new): The device as in claim 1, wherein the measuring appliances comprise:

a first measuring appliance associated with a first network domain and executing a first measuring process to collect the local measurements of a first local end-to-end data stream which traverses the first network domain;

a second measuring appliance associated with a second network domain, coupled with the first network domain, which second measuring appliance executes a second measuring process to collect the local measurements of a second local end-to-end data stream which traverses the second network domain; and

a third measuring appliance associated with a third network domain, coupled with the second network domain, which third measuring appliance executes a third measuring process to collect the local measurements of a third local end-to-end data stream which traverses the third network domain,

wherein each first, second and third measuring process differs from other measuring processes being executed and includes one of:

a passive measuring process which collects information of each type of a data stream and of each packet of the data stream,

an active measuring process which collects information on a periodic basis, or

a measuring process based on a measurement model generated in advance for a corresponding network domain.

29. (new): A multi-domain management device, comprising:

a monitoring module to generate and initiate a measurement configuration for measuring appliances executing various measuring processes and being associated with corresponding domains of a network, which domains are coupled to one another and facilitate a passage for an overall end-to-end data streams, as a function of at least a corresponding measuring process of the measuring appliance and overall measurement specifications of the network;

configuration modules, each coupled to the measuring appliances executing an alike measuring process, to configure each measuring appliance based on the generated measurement configuration so that the configured measuring appliances deliver local measurements representing parameter values of corresponding local end-to-end data streams, which each traverses the associated network domain, based on the corresponding measuring processes; and

calculation means, coupled to the configuration modules, for determining data representative of parameters values of the overall end-to-end data streams based the delivered local measurements of the local end-to-end data streams.